SENNHEISER

Travel

Silence For Your Aural Indulgence

PXC 310

Kurzanleitung
Quick Guide
Guide rapide
Quick Guide
Guia rápido
Guida rapida
Quick Guide
Hızlı Kılavuz
Quick Guide
Snabbguide
Quick Guide
الدليل السريع

- Please read this instruction manual carefully and completely before using the headphones.
- Make this instruction manual easily accessible to all users at all times. Always include this instruction manual when passing the headphones on to third parties.
- Do not use the headphones in situations which require special attention.
- Always keep the headphones dry and do not expose them to extreme temperatures (normal operating temperatures: 10°C to 35°C).
- Use the headphones with care and store them in a clean, dust-free environment.
- Switch off the headphones after use to conserve battery power. Remove the battery pack if the headphones will not be used for extended periods of time.
- Please protect your hearing from high volume levels. Sennheiser headphones also sound exceptionally good at low volumes.
- Only use genuine Sennheiser mains units and charging cables.

Danger due to magnetic fields!

Headphones contain magnets that generate a magnetic field which could cause dangerous interference with cardiac pacemakers and implanted defibrillators.

- Keep the headphones at least 1.2" (3 cm) from cardiac pacemakers or implanted defibrillators (IE: do not allow the headphones to dangle on your chest while not wearing them if you have such a device fitted).

Intended use of the headphones includes

- having read this instruction manual, especially the chapter "Important safety instructions",
- using the headphones within the operating conditions and limitations described in this instruction manual.

"Improper use" means using the headphones other than as described in this instruction manual, or under operating conditions which differ from those described herein.

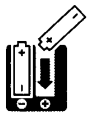
The PXC 310 has a Lithium-Polymer battery pack. If abused or misused, the battery pack may leak.

- Heat hazard
- Fire hazard
- Explosion hazard
- Smoke or gas hazard

Please understand that Sennheiser does not accept liability for damage arising from abuse or misuse.

Keep away from children.

Do not pack charged batteries loose – danger of shorting out/fire hazard.



Observe correct polarity.

Immediately remove the battery pack from an obviously defective device.

Do not continue to use a defective battery pack.

Switch battery pack-powered devices off after use.

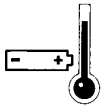
Do not expose to moisture.

When not using the battery pack for extended periods of time, charge it regularly (about every 3 months).

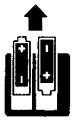
Do not short-circuit.

Do not heat above 70°C/ 158°F, e.g. do not expose to sunlight or throw into a fire.

Do not mutilate or dismantle.



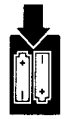
Only charge the battery pack at ambient temperatures between 10°C and 40°C.



When not using the device for extended periods of time, remove the battery pack from the device.

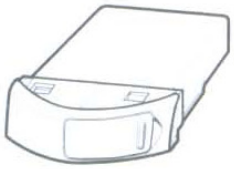
Dispose of the battery pack at special collection points or return it to your specialist dealer.

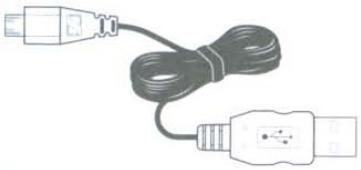
Only use the original Sennheiser battery pack.

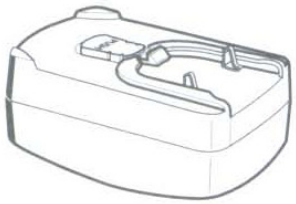


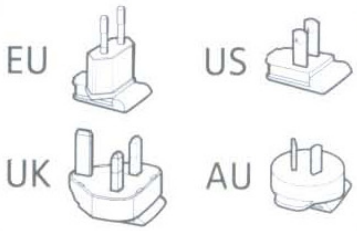
Only charge the battery pack with the appropriate Sennheiser chargers.

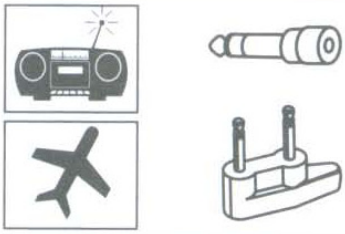
1 Scope of delivery

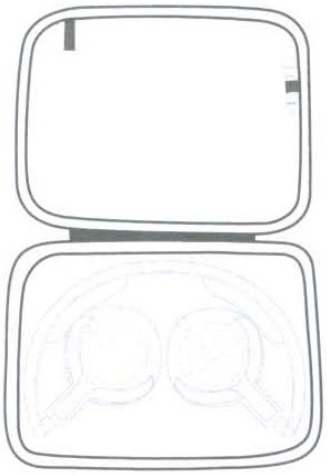


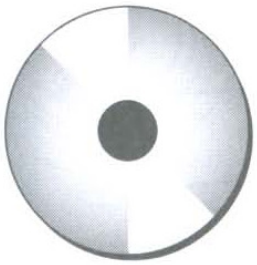




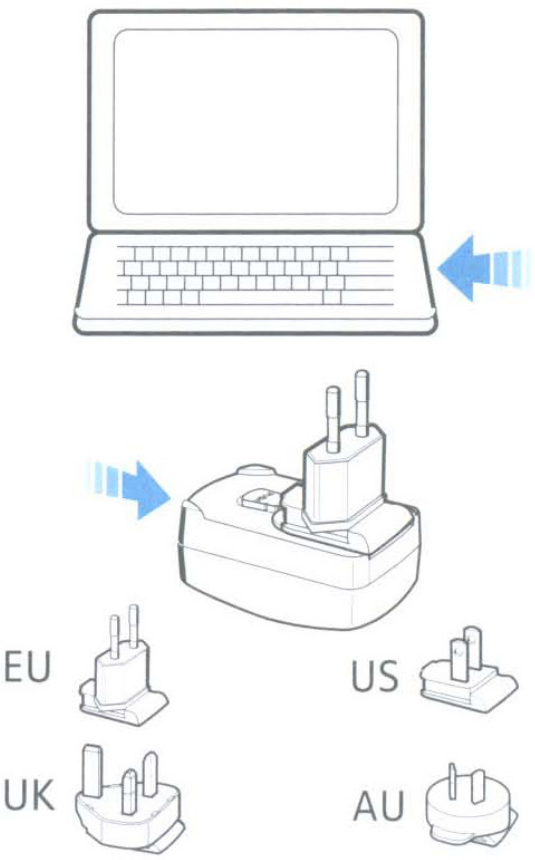




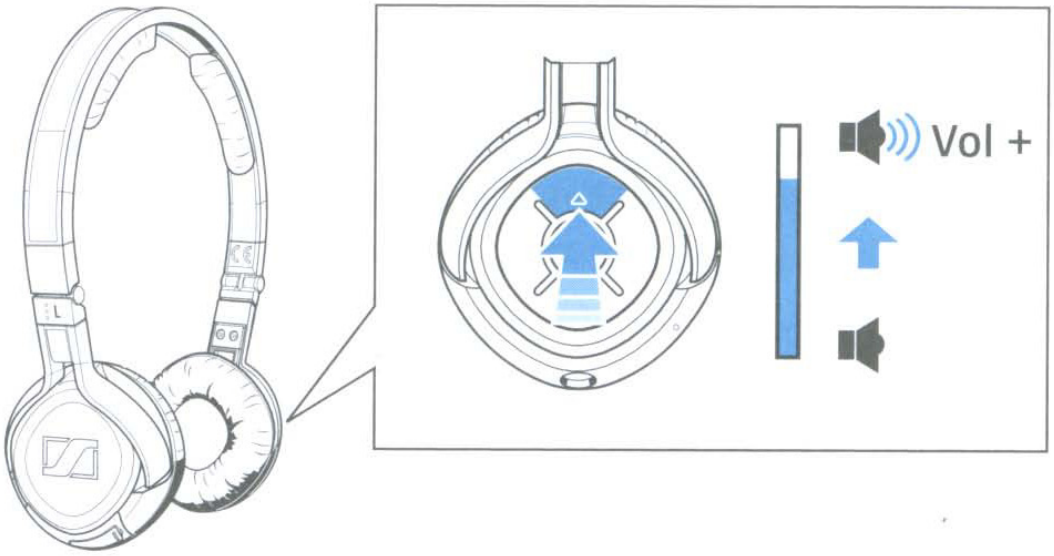


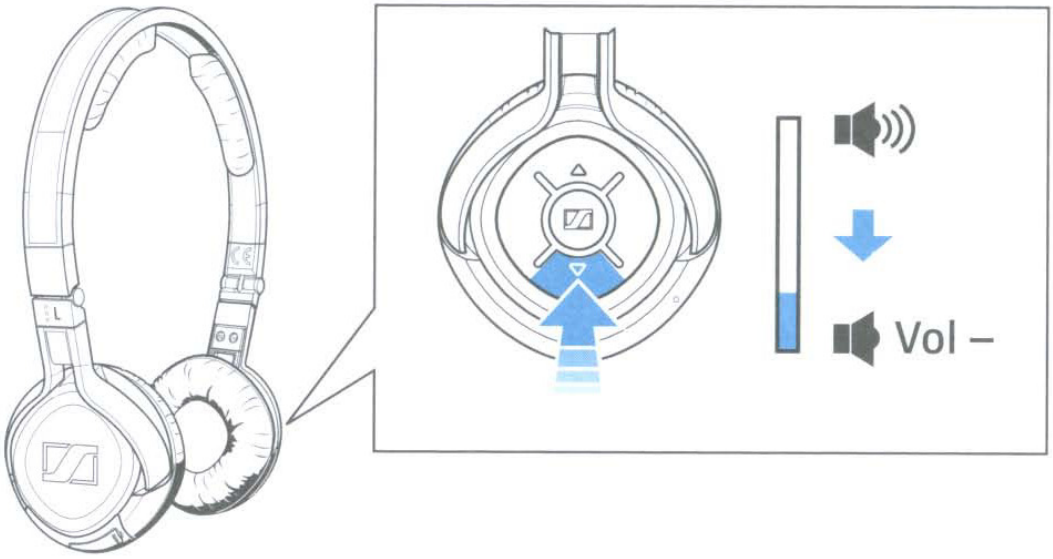


2 Charging the battery



3 Setting the volume





Sennheiser electronic GmbH & Co. KG gives a warranty of 24 months on this product. For the current warranty conditions, please visit our web site at www.sennheiser.com or contact your Sennheiser partner.

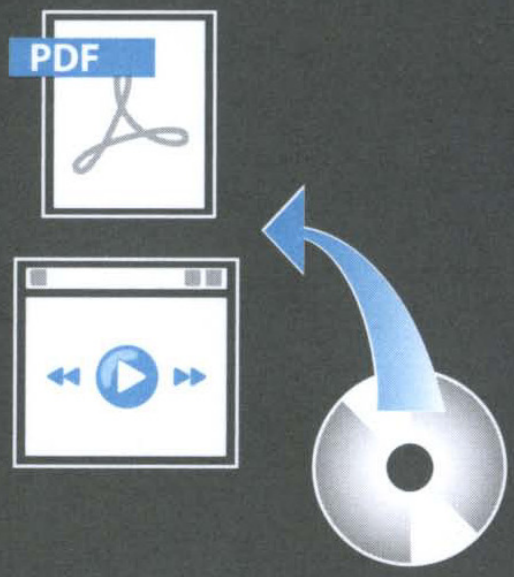
These devices comply with the basic requirements and other relevant provisions of the following directives:

- EMC Directive (2004/108/EC)
- Low Voltage Directive (2006/95/EC)
- Battery Directive (2006/66/EC)
- RoHS Directive (2002/95/EC)
- WEEE Directive (2002/96/EC)

The declaration is available on the Internet at www.sennheiser.com. Before putting the devices into operation, please observe the respective country-specific regulations!

Travel

Silence For Your Aural Indulgence



SENNHEISER

Sennheiser electronic GmbH & Co. KG,
Am Labor 1, 30900 Wedemark, Germany
www.sennheiser.com

Printed in China
Publ. 01/09
532811/A02

SENNHEISER

PXC 310

User manual
Animated manual

SENNHEISER

Travel

Silence For Your Aural Indulgence

PXC 310

Instruction Manual

Contents

Important safety instructions **2**
PXC 310 ..... **4**
Delivery includes **5**
Product overview **7**
Putting the PXC 310 into operation **8**
Charging the battery pack 8
Connecting the audio cable 10
Adjusting the headband 10
Using the PXC 310 ..... **11**
Switching the headphones on/off 11
Adjusting the headphones to the listening situation 11
Changing the volume 12
Transporting the PXC 310 ..... **13**
Cleaning the PXC 310 ..... **14**
If a problem occurs **15**
Accessories and spare parts **16**
Specifications **17**
Manufacturer Declarations **18**

Important safety instructions

- Please read these instructions carefully and completely before using the headphones.
- Make these instructions easily accessible to all users at all times. Always include these instructions when passing the headphones on to third parties.
- Do not use the headphones in situations which require special attention (e.g. in traffic or when performing skilled jobs).
- Always keep the headphones dry and do not expose them to extreme temperatures (normal operating temperatures: 10°C to 35°C).
  - Use the headphones with care and store them in a clean, dust-free environment.
  - Switch off the headphones after use to conserve battery power. Remove the batteries if the headphones will not be used for extended periods of time.
- The headphones contain magnets that generate a magnetic field which could cause dangerous interference with cardiac pacemakers and implanted defibrillators. Keep the headphones at least 1.2" (3 cm) from cardiac pacemakers or implanted defibrillators.
- Please protect your hearing from high volume levels. Sennheiser headphones also sound exceptionally good at low volumes.
- Only use the supplied mains unit and charging cable.
- To reduce the risk of fire or electric shock, do not use the device and the mains unit near water and do not expose them to rain or moisture.
- Unplug the mains unit from the wall socket
  - to completely disconnect the device from the mains
  - during lightning storms or
  - when unused for long periods of time.
- Only operate the mains unit from the type of power source specified in the chapter "Specifications" (page 17).
- Ensure that the mains unit is
  - in a safe operating condition and easily accessible,
  - properly plugged into the wall socket,
  - only operated within the permissible temperature range,
  - not covered or exposed to direct sunlight for longer periods of time in order to prevent heat accumulation (see "Specifications" on page 17).
- Do not operate the device and the mains unit near any heat sources.
- Only use attachments/accessories specified by Sennheiser.

Intended use of the headphones

Intended use of the headphones includes

- having read this instruction manual, especially the chapter ''Important safety instructions'' on page 2,
- using the headphones within the operating conditions and limitations described in this instruction manual.

''Improper use'' means using the headphones other than as described in this instruction manual, or under operating conditions which differ from those described herein.

Safety instructions for the Lithium-Polymer battery pack

If abused or misused, the battery pack may leak. In extreme cases, it may even present

- a heat hazard,
- a fire hazard,
- an explosion hazard,
- a smoke or gas hazard.

Please understand that Sennheiser does not accept liability for damage arising from abuse or misuse.

	Keep away from children.		Do not pack charged batteries loose – danger of shorting out/fire hazard.
	Observe correct polarity.		Do not short-circuit.
	Dispose of the battery pack at special collection points or return it to your specialist dealer.		Switch battery pack-powered devices off after use.
	Only charge the battery pack with the appropriate Sennheiser chargers.		When not using the battery pack for extended periods of time, charge it regularly (about every 3 months).
	Only charge the battery pack at ambient temperatures between 10°C and 40°C.		Do not heat above 70°C/ 158°F, e.g. do not expose to sunlight or throw into a fire.
	Do not mutilate or dismantle.		Do not continue to use a defective battery pack.
	Immediately remove the battery pack from an obviously defective device.		When not using the device for extended periods of time, remove the battery pack from the device.
	Only use the original Sennheiser battery pack.		Do not expose to moisture.

PXC 310

The PXC 310 headphones provide undisturbed music enjoyment in noisy environments. Their supra-aural, closed design and the latest active noise compensation technology (NoiseGard) make the PXC 310 especially suitable for use with in-flight entertainment systems. Due to their active and passive attenuation of ambient noise, they let you enjoy music even in noisy environments.

NoiseGard™

The NoiseGard active noise compensation system is based on the principle of cancelling out sound using ''anti-sound'' (phase-inverted sound). Tiny microphones pick up low-frequency ambient noise (up to 1 kHz) near the ear. The NoiseGard electronics use this noise to generate a sound wave which is the exact opposite (IE: at the same level but polarity reversed – 180° out-of-phase), the effect being that the polarity reversed signal cancels most of the outside noise.

TalkThrough

The PXC 310 headphones have a TalkThrough function, which allows you to communicate with other people without having to remove the headphones. When TalkThrough is activated, professional quality microphones mounted on the outside of the headphones pick up all acoustic signals in the immediate vicinity. Annoying background noise, e.g. from turbine engines, is electronically filtered out, only allowing the voice of the other person to pass through the headphones clearly.

Additional features

- Outstanding sound quality due to patented adaptive baffle damping and Duofol diaphragms
- Optimum protection against ambient noise due to active and passive noise attenuation
- Great for travel: comfortable, rugged and foldable headphone construction with single-sided cable
- The headphones can be used as passive hearing protectors

Delivery includes

1 PXC 310 headphones
1 BA 370 PX battery pack
1 USB charging cable
1 PSC 03R-050 mains unit with country adapters
1 audio cable (2.5 mm to 3.5 mm jack plug)
1 audio adapter (6.35 mm jack plug)
1 in-flight adapter (3.5 mm double mono jack plug)
1 transport case
1 quick start guide
1 CD ROM with
  – detailed instruction manual (PDF file)
  – interactive instruction manual

Overview of the pictograms

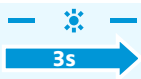
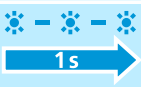
Meaning of the pictograms for pressing a button

Pictogram	Meaning
	Briefly press this button.
	Keep this button pressed for 4 seconds.
	Keep this button pressed until the desired setting is made or the desired action is completed.

Meaning of the pictograms for the flashing of the LED

Pictogram	Meaning
	This pictogram symbolizes a flashing.
	This pictogram symbolizes an interruption.
	This pictogram symbolizes an interval.

Examples of some of the pictograms that are used throughout this instruction manual:

Pictogram	Meaning
	The LED flashes once every 3 seconds.
	The LED flashes 3 times per second.
	The LED flashes in a rhythmic sequence.
	The LED flashes blue 3 times and then goes off.

The pictogram “i”?

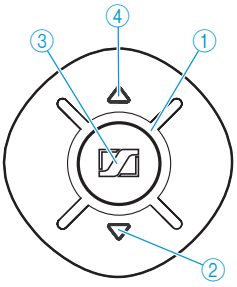
This note provides important information!

Notes marked with the pictogram “i” provide important information on the use of the headphones.

Product overview

1 Headband
2 Microphone
3 Socket for audio cable
4 Earpad
5 Socket for charging cable
6 Battery pack compartment
7 Microphone

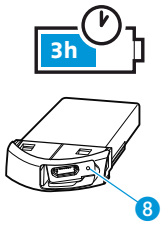
A Operating panel



① Star LED
② Volume ▼ button
③ Master button
④ Volume ▲ button

Putting the PXC 310 into operation

Charging the battery pack



- Before using the battery pack for the first time, charge it for at least 3 hours.

When charging the battery pack outside the headphones, the LED 8 on the battery pack lights up red. When the battery pack is fully charged, the LED 8 on the battery pack lights up green.

When the battery pack is almost flat, the Star LED 1 on the headphones flashes red rapidly.

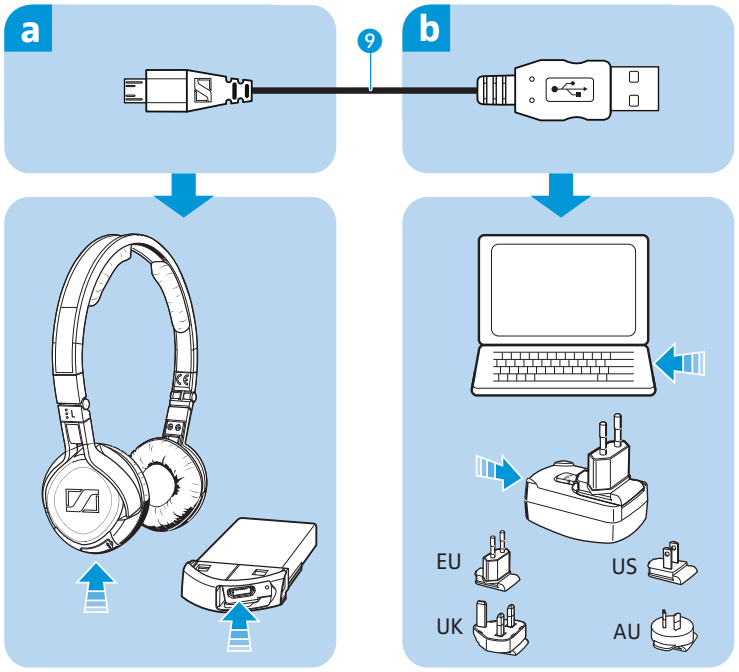
Type of use	Operating time
Using the headphones with NoiseGard	20 hours

The operating time of the battery pack depends on the device settings, the listening situation and the audio sources used.

Conserving the battery power

Remove the battery pack if the headphones will not be used for extended periods of time.

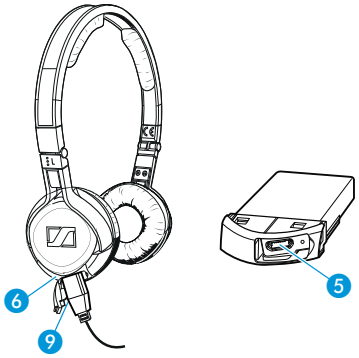
Possibilities of charging the battery pack



First, connect the charging cable 9 to the battery pack as described in section a and then connect the charging cable 9 to a power source as described in section b.

a Connecting the charging cable to the battery pack

You can charge the battery pack either inside or outside the headphones. This is helpful if you are using a spare battery pack (to be ordered separately).



To charge the battery pack inside the headphones:

- Open the battery pack compartment cover 6 on the left earcup.
- Connect the charging cable 9 to the socket for charging cable 5 on the headphones.

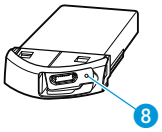
To charge the battery pack outside the headphones:

- Open the battery pack compartment cover 6 on the left earcup.
- Press the button next to the battery pack compartment and remove the battery pack.
- Connect the charging cable 9 to the socket for charging cable 5 on the battery pack.

b Connecting the charging cable to the mains unit, to a PC or to other USB devices

In order to charge the battery pack, you can connect the charging cable to either the USB socket of your PC or to the supplied mains unit or to other USB devices.

To connect the charging cable to a PC:



- Connect the USB plug of the charging cable 9 to the USB socket of your PC. The battery pack is being charged. The LED 8 on the battery pack lights up red.

To connect the charging cable to the mains unit:

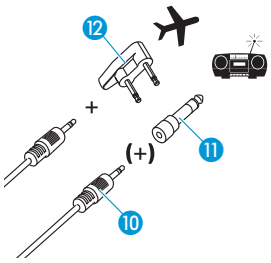
- Connect the charging cable 9 to the mains unit.
- Plug the suitable country adapter onto the mains unit.
- Plug the mains unit into a wall socket.
  The battery pack is being charged. The LED 8 on the battery pack lights up red.
- After charging, unplug the mains unit from the wall socket.

If you have charged the battery pack outside the headphones:

- Insert the charged battery pack into the headphone's battery pack compartment until it locks into place.
- Close the battery pack compartment cover 6.

Connecting the audio cable

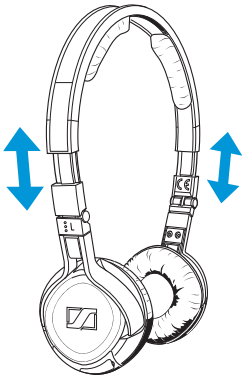
Connecting the audio cable



- Connect the 2.5 mm jack plug of the audio cable to the socket 3 of the headphones.
- Connect the 3.5 mm jack plug of the audio cable 10 to
  - the headphone socket of your audio source or
  - the audio adapter for 6.35 mm jack socket 11 if the 3.5 mm jack plug of the audio cable is too small or
  - the in-flight adapter 12 if you want to use the headphones with an in-flight entertainment system.

When the audio cable is connected to your audio source, you hear the sound from your audio source and the Star LED ① flashes red.

Adjusting the headband



For optimum transmission quality, good noise attenuation and best possible comfort, the headband has to be adjusted to properly fit your head:

- Wear the headphones so that the headband 1 runs over the top of your head.
- Adjust the length of the headband so that
  - the earpads 4 rest comfortably against the ears,
  - you feel even, gentle pressure around your ears,
  - a snug fit of the headband 1 on the head is ensured.
- To ensure maximum noise attenuation, final adjustment is best made in a noisy environment.

Using the PXC 310

Switching the headphones on/off

CAUTION! Hearing damage due to high volumes!

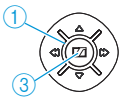
Listening at high volume levels for long periods can lead to permanent hearing defects. Please protect your hearing. Sennheiser headphones also sound exceptionally good at low volumes.

▶ Set the volume to a medium level.

Switching the headphones on

▶ Press the Master button ③ and keep it pressed until the Star LED ① lights up red. If you release the Master button ③, the Star LED ① continues to flash red.

Switching the headphones off



▶ Press the Master button ③ and keep it pressed until the Star LED ① goes off.

Adjusting the headphones to the listening situation

The headphones have a TalkThrough function. Depending on the listening situation, you can switch this function on or off.

Switching the TalkThrough function on/off

The headphones provide excellent attenuation of ambient noise. The TalkThrough function allows you to communicate undisturbed with other people even when the NoiseGard function is switched on.

To switch the TalkThrough function on:

▶ Briefly press the Master button ③.
The Star LED ① lights up green.

To switch the TalkThrough function off:

▶ Briefly press the Master button ③.
The Star LED ① flashes red.

Changing the volume

The headphones allow you to change the volume of the audio signal or the volume of the TalkThrough function:

Button	Duration	Function	Button	Duration	Function
		Incrementally increases the volume			Incrementally reduces the volume
		Continuously increases the volume			Continuously reduces the volume

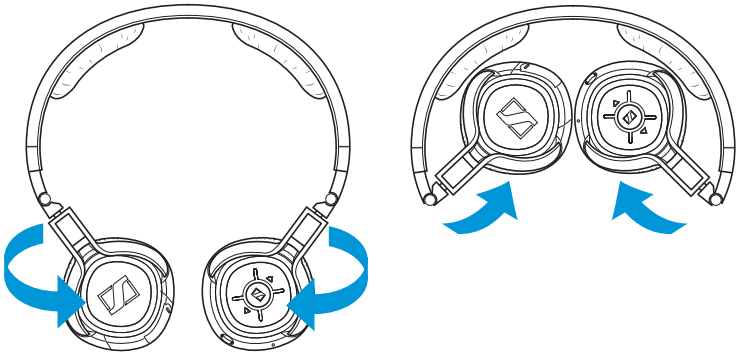
If you press the respective button briefly, the volume is changed incrementally; if you hold down the button, the volume is changed continuously.

When the minimum or maximum volume is reached, you hear an acknowledgement tone.

Transporting the PXC 310

For space-saving transportation, the headphones can be folded up flatly and compactly.

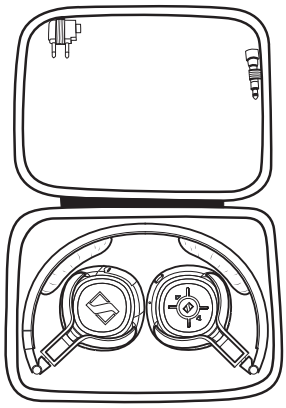
- Rotate the earcups by 90°.
- Tuck the earcups between the headband.
- Place the headphones flat into the transport case.



Your accessories can be transported in the cover of the transport case:

– Audio adapter (6.35 mm jack plug)

– In-flight adapter (3.5 mm double mono jack)



Cleaning the PXC 310

Cleaning the headphones

CAUTION! Liquids can damage the electronics of the device!

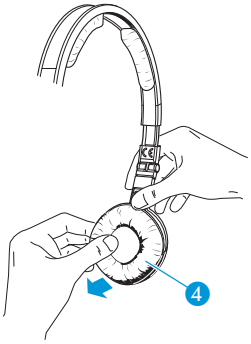
Liquids entering the housing of the device can cause a short-circuit and damage the electronics.

- Keep all liquids far away from the device.
- Do not use any cleansing agents or solvents.

For reasons of hygiene, you should clean the headphones regularly:

- Before cleaning, make sure that the headphone are not recharged via the mains.
- Only use a soft, slightly damp cloth to clean the headphones.

Replacing the earpads



You can replace the earpads. Spare earpads are available as accessories (see "Accessories and spare parts" on page 16).

- Grasp the edge of the earpad 4 behind the earcup and peel it up and away from the earcup.
- Slide the new earpad 4 onto the earcup.

If a problem occurs ...

Problem	Possible cause	Solution
No operation indicator – headphones cannot be switched on	The battery pack is flat.	Recharge the battery pack (page 8).
No audio signal	The jack plug of the audio cable is not properly connected.	Check the connection to your audio source (page 10).
No audio signal during NoiseGard operation	The volume is adjusted too low.	Increase the volume (page 12).
	The TalkThrough function is switched on. When in TalkThrough mode, the audio signal is not available.	Switch the TalkThrough function off (page 11).
Headphones do not react to any button press	The operation of the headphones is faulty.	Remove the battery pack from the headphones. Reinsert the battery pack into the headphones. Switch the headphones on again.

Accessories and spare parts

The following PXC 310 accessories are available from your specialist dealer:

Cat. No.	Accessory/spare part
531404	Earpads, 1 pair
531405	Headband padding, 1 pair
521829	PSC 03R-050 mains unit with 4 country adapters (EU/UK/US/AU)
531406	Audio cable (2.5 mm jack plug to 3.5 mm jack plug)
525731	In-flight adapter 3.5 mm double mono jack plug
531407	USB cable (microUSB to USB)
530695	BA 370 PX battery pack

Specifications

Transducer principle	dynamic, closed
Ear coupling	supra-aural
Frequency response	15–22,000 Hz
Nominal impedance active/passive	590/100 Ω
Sound pressure level at 1 kHz and 1 Volt	107 dB SPL
THD at 1 kHz	< 0.1%
Audio connector	3.5 mm stereo jack plug
Audio adapter	6.35 mm stereo jack plug
In-flight adapter	3.5 mm double mono jack plug
Cable length	
Audio cable	1.4 m
Charging cable	0.8 m
Weight	105 g
BA 370 PX battery pack	3.7 V; 250 mAh Lithium-Polymer
Charging time	3 hrs
Operating time	20 hrs
Operating temperature range	0°C to +40°C
Storage temperature range	–10°C to +70°C
Passive noise attenuation	25 dB
NoiseGard active noise compensation	23 dB

PSC 03R-050 mains unit

Nominal input voltage	110–240 V~
Nominal input current	max. 0.2 A
Mains frequency	50–60 Hz
Nominal output voltage	5 V ⎓
Nominal output current	max. 0.5 A
Operating temperature range	0°C to +45°C
Storage temperature range	–40°C to +85°C
Relative humidity	20 to 90% RH
Weight	approx. 61 g

Manufacturer Declarations

Warranty

Sennheiser electronic GmbH & Co. KG gives a warranty of 24 months on this product. For the current warranty conditions, please visit our web site at www.sennheiser.com or contact your Sennheiser partner.

CE Declaration of Conformity

These devices comply with the basic requirements and other relevant provisions of the following directives:

- EMC Directive (2004/108/EU)
- Low Voltage Directive (2006/95/EU)
- RoHS Directive (2002/95/EU)
- WEEE Directive (2002/96/EU)
- Battery Directive (2006/66/EU)

The declaration is available on the internet at www.sennheiser.com. Before putting the devices into operation, please observe the respective country-specific regulations!

Statements regarding FCC and industry Canada

FCC Declaration of Conformity (DoC)

FC SENNHEISER
Model No: PXC 310

We,

Sennheiser Electronic Corporation
Strat. Marketing • Stefanie Reichert
One Enterprise Drive • Old Lyme •
CT 06371 • USA
Tel: +1 (860) 434 9190, ext. 144
Fax: +1 (860) 434 1759

declare the above device comply with the requirements of Federal Communications Commission.

This device complies with Part 15 of the FCC rules. Operation is subjected to the following two conditions:
1) This device may not cause harmful interference, and
2) This device must accept any interference received, including interference that may cause undesired operation.

Responsible Party: John Falcone

This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This class B digital apparatus complies with the Canadian ICES-003.

Changes or modifications made to this equipment not expressly approved by Sennheiser electronic Corp. may void the FCC authorization to operate this equipment.

In compliance with:

USA	47CFR Part 15 B
Canada	ICES-003
Europe	
Australia, New Zealand	N340

Trademarks

Sennheiser and NoiseGard™ are registered trademarks of Sennheiser electronic GmbH & Co. KG.

iPod® and iPhone® are registered trademarks of Apple Computer, Inc.

Sennheiser electronic GmbH & Co. KG
Am Labor 1, 30900 Wedemark, Germany
www.sennheiser.com

Publ. 01/09
532819/A02